State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

12/22/05

CERTIFIED MAIL

RE: Preliminary Proposed Title V Significant Permit Modification
Chapter 3745-77 permit

15-76-05-0694
Republic Engineered Products, Inc.
Patrick L. Monnot
2633 8th Street NE
Canton, OH 44704

Dear Patrick L. Monnot:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 11/16/05. The comment period has ended. We are now ready to submit this permit to USEPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written or with agreed-upon changes, then you have the opportunity to schedule a meeting with us to discuss your concerns.

Please contact Jim Orlemann, Engineering Section Manager, 614-644-3592, or you can telefax your request to (614) 644-3681, within fourteen (14) days from receipt of this letter if a meeting is desired. If a request for a meeting is not received within fourteen (14) days of receipt of this letter, we will forward this proposed permit (as written, or with agreed-upon changes) to USEPA for approval.

Very truly yours,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: Canton Division of Air Pollution Control
File, DAPC PMU

State of Ohio Environmental Protection Agency

PRELIMINARY PROPOSED TITLE V SIGNIFICANT PERMIT MODIFICATION

Original Effective Date:	Expiration Date: 01/01/00	Modification Effective Date: ***To be entered upon final issuance***

This document constitutes issuance of a Title V permit for Facility ID: 15-76-05-0694 to:

Republic Engineered Products, Inc.
2633 Eighth Street NE
Canton, OH 44704-2311

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

B001 (Boiler #1)
Steam generation

B002 (Boiler #2)
Steam generation

F001 (Roadways and Parking Areas)
Vehicular Traffic on Plant Roadways and Parking Areas

P068 (#3 & #4 Melt Shops Lime and Alloy Transfer)
Lime and alloy transfer and conveying system

P070 (#4 Grinder at #5 Steel Conditioning)
Steel billet grinder

P071 (#5 Grinder at #5 Steel Conditioning)
Steel billet grinder

P076 (#12 Grinder at #5 Steel Conditioning)
Steel billet grinder

P078 (#14 Grinder at #5 Steel Conditioning)
Steel billet grinder

P106 (LRS #4 Melt Shop)
Ladle Metallurgy/Refining Station in #4 Melt Shop

P123 (CRP - Ladle Metallurgical Facility (LMF))
Ladle Metallurgical Facility

P126 (CRP - Reheat Furnace)
Natural Gas fired reheat furnace and rolling mill

P128 (CRP - Alloy Truck Dumping)
Alloy Truck Dumping

P129 (CRP - Alloy Conveying and Silos)
Alloy Conveying and Silos

P905 (#7 EAF - #4 Melt Shop)
Electric arc steel making furnace

P907 (#9 EAF - #4 Melt Shop)
Electric arc steel making furnace

Z002 (#4 Melt Shop Ladle Dryers/Preheaters)
Natural gas fired ladle dryer/preheater stands

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Canton Division of Air Pollution Control
420 Market Avnue N.
Canton, OH 44702-1544
(330) 489-3385

OHIO ENVIRONMENTAL PROTECTION AGENCY

Joseph P. Koncelik
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Record Keeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.III of Part III of this Title V permit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c. The permittee shall submit required reports in the following manner:

i. **All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:**

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter.

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those

reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

ii. **Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.IV of Part III of this Title V permit or, in some cases, in Part II of this Title V permit, all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this General Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this General Term and Condition.

See B.6 below if no deviations occurred during the quarter.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

iii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted in the following manner:**

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; General Terms and Conditions: A.2, A.3, A.4, A.6.e, A.7, A.12, A.14, A.18, A.19, A.20, and A.22 of Part I of this Title V permit, as well as any deviations from the requirements in Section A.V or A.VI of Part III of this Title V permit**,** and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six

calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in Part II.A of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with General Term and Condition A.1.c.ii above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

v. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

2. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in General Term and Condition A.1.c.i above.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. (“Act”); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.
(Authority for term: OAC rule 3745-77-07(A)(5))

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
(Authority for term: OAC rule 3745-77-07(A)(6))

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

f. Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable upon final issuance of all applicable OAC Chapter 3745-35 operating permits and/or registrations for all subject emissions units located at the facility and:

i. the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a “major source” as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

ii. the permittee no longer meets the definition of a “major source” as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

iii. a combination of i. and ii. above.

The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.
(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.
(Authority for term: OAC rule 3745-77-07(A)(8))

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.
(Authority for term: OAC rule 3745-77-07(A)(9))

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.
(Authority for term: OAC rule 3745-77-07(A)(10))

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.
(Authority for term: OAC rule 3745-77-07(B))

12. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.

ii. Compliance certifications shall include the following:

(a) An identification of each term or condition of this permit that is the basis of the certification.

(b) The permittee's current compliance status.

(c) Whether compliance was continuous or intermittent.

(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.

(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

13. Permit Shield

a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed

under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).
(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.
(Authority for term: OAC rule 3745-77-07(G))

16. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.
(Authority for term: OAC rule 3745-77-07(I))

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.
(This term is provided for informational purposes only.)

18. Insignificant Activities or Emissions Levels

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.
(Authority for term: OAC rule 3745-77-07(A)(1))

19. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-07(A)(1))

20. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.
(Authority for term: OAC rule 3745-77-07(A)(1))

21. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-01)

22. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11))

B. ***State Only Enforceable Section***

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

2. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

3. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

4. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

5. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

6. Additional Reporting Requirements When There Are No Deviations of <u>Federally Enforceable</u> Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations

occurred during that quarter. The reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a. where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in General Term and Condition A.1.c.ii; or

b. where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or

c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

1. The following insignificant emissions units located at this facility have applicable emission limitations and/or control requirements as follows:

F002 - plant storage piles;
F005 - slag loading and transport;
F006 - melt shop baghouse dust handling;
G001 - gasoline and diesel sources (PTI 15-0488);
K001 - paint booth, electric repair (PTI 15-0805);
L020 - S-K unit cleaner #39 (PTI 15-0768);
L021 - S-K unit cleaner #40 (PTI 15-0768);
L022 - S-K unit cleaner #43 (PTI 15-0768);
L023 - S-K unit cleaner #44 (PTI 15-0768);
L024 - S-K unit cleaner #45 (PTI 15-0768);
L026 - S-K unit cleaner #48 (PTI 15-0768);
L028 - S-K unit cleaner #50 (PTI 15-0768);
L031 - S-K unit cleaner #71 (PTI 15-0768);
L032 - S-K unit cleaner #72 (PTI 15-0768);
L033 - S-K unit cleaner #73 (PTI 15-0768);
L035 - S-K unit cleaner #75 (PTI 15-0768);
L036 - S-K unit cleaner #80 (PTI 15-0768);
L037 - S-K unit cleaner #114 (PTI 15-0768);
L039 - S-K unit cleaner #117 (PTI 15-0768);
L044 - S-K unit cleaner #51 (PTI 15-0816);
L046 - S-K unit cleaner #200 (PTI 15-1071);
L049 - S-K unit cleaner #203 (PTI 15-1075);
L050 - S-K unit cleaner #204 (PTI 15-1075);
L051 - S-K unit cleaner #205 (PTI 15-1075);
L053 - S-K unit cleaner #208 (PTI 15-1080);
L054 - S-K unit cleaner #209 (PTI 15-1080);
P124 - CRP - vacuum tank (PTI 15-1093);
P125 - continuous caster area (PTI 15-1093);
P127 - CRP - sample grinder (PTI 15-1093);
P142 - shot blaster at #5 steel conditioning (PTI 15-1340);
P150 - Tundish preheater #1 (PTI 15-1340);
P151 - Tundish preheater #2 (PTI 15-1340); and
P908 - truck dumping of lime, flux and alloy.

Each insignificant emissions unit at this facility must comply with all applicable State and Federal Regulations, as well as any emission limitations and/or control requirements contained within the identified permits to install for the emissions units. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the SIP-approved versions of OAC Chapter 3745-17, 3745-18 and 3745-21.

B. State Only Enforceable Section

1. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

L001 - S-K unit cleaner #34;
L002 - S-K unit cleaner #35;
L005 - S-K unit cleaner #68;
L008 - S-K unit cleaner #76;
L015 - S-K unit cleaner #30;
P054 - met lab fume hood #1 East;
P055 - met lab fume hood #1 North;
P066 - no. 22 coil heat treat furnace;
P107 - #1 test furnace;
P117 - chain repair furnace;
P119 - met lab fume hood - etch house;
P120 - met lab fume hood #1 East (South);
P121 - met lab fume hood 3rd floor;
Z004 - scrap preparation torch cutting;
Z006 - spray painting;
Z007 - #2 draw test furnace;
Z008 - blacksmith oil quench;
Z009 - bar finish oil dip tank;

Z010 - 8" shipping oil dip tank;
Z011 - #1 HT oil quench;
Z012 - saw #1 bar finish;
Z013 - test saw;
Z014 - boiler house em. gen;
Z015 - #25 furnace em. gen;
Z016 - shot blasting at open hearth;
Z017 - blast unit - met lab;
Z019 - S-K unit cleaner #31;
Z020 - S-K unit cleaner #32;
Z021 - S-K unit cleaner #46;
Z022 - S-K unit cleaner #49;
Z024 - S-K unit cleaner #214;
Z025 - S-K unit cleaner #215;
Z026 - vacuum degasser - #4 melt shop;
Z200 - S-K unit cleaner #31;
Z201 - S-K unit cleaner #46;
Z202 - S-K unit cleaner #60;
Z203 - S-K unit cleaner #206;
Z204 - S-K unit cleaner #211;
Z205 - S-K unit cleaner #212;
Z206 - S-K unit cleaner #213;
Z207 - S-K unit cleaner;
Z208 - S-K unit cleaner;
Z209 - S-K unit cleaner #216;
Z210 - S-K unit cleaner #217;
Z211 - S-K unit cleaner #218;
Z212 - S-K unit cleaner #219; and
Z213 - S-K unit cleaner #220.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler #1 (B001)

Activity Description: Steam generation

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Boiler #1, Babcock and Wilcox model FM, 170 mmBtu/hr, fired with natural gas	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)(1)	.020 lb of particulate emissions per mmBtu of actual heat input
	40 CFR Part 52.1881(b)(27)(ii)	2.50 lbs of sulfur dioxide per mmBtu actual heat input

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

3. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

.020 lb of particulate emissions per mmBtu of actual heat input

Applicable Compliance Method:

If required, compliance shall be demonstrated by performing emission tests in accordance with 40 CFR Part 60, Appendix A, Method 5. Dividing the USEPA's AP-42 emission factor of 1.9 lbs of particulate emissions per mmscf of natural gas (Section 1.4, Table 1.4-2 (7/98)) by the heat content of the natural gas, 1040 Btu per scf, results in an emission rate of 0.0018 lb of particulate emissions per mmBtu.

1.c Emission Limitation:

2.50 lbs of sulfur dioxide per mmBtu actual heat input

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 6.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler #2 (B002)

Activity Description: Steam generation

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Boiler #2, Babcock and Wilcox model FM, 170 mmBtu/hr, fired with natural gas	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)(1)	.020 lb of particulate emissions per mmBtu of actual heat input
	40 CFR Part 52.1881(b)(27)(ii)	2.50 lbs of sulfur dioxide per mmBtu actual heat input

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

3. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

.020 lb of particulate emissions per mmBtu of actual heat input

Applicable Compliance Method:

If required, compliance shall be demonstrated by performing emission tests in accordance with 40 CFR Part 60, Appendix A, Method 5. Dividing the USEPA's AP-42 emission factor of 1.9 lbs of particulate emissions per mmscf of natural gas (Section 1.4, Table 1.4-2 (7/98)) by the heat content of the natural gas, 1040 Btu per scf, results in an emission rate of 0.0018 lb of particulate emissions per mmBtu.

1.c Emission Limitation:

2.50 lbs of sulfur dioxide per mmBtu actual heat input

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Method 6.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Roadways and Parking Areas (F001)

Activity Description: Vehicular Traffic on Plant Roadways and Parking Areas

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
roadways and parking areas: approximately 16 miles of paved and unpaved roadways and 19 acres of paved and unpaved parking areas used by vehicles with 4 to 18 wheels		
paved roadways and parking areas (see section A.I.2.a)	OAC rule 3745-17-07(B)(4)	There shall be no visible fugitive particulate emissions from any paved roadway or parking area except for a period of time not to exceed 6 minutes during any 60-minute observation period.
	OAC rule 3745-17-08(B)(8)	reasonably available control measures (see sections A.I.2.c, A.I.2.d, A.I.2.e, and A.I.2.i)
unpaved roadways and parking areas (see section A.I.2.b)	OAC rule 3745-17-07(B)(5)	There shall be no visible fugitive particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed 13 minutes during any 60-minute observation period.
	OAC rule 3745-17-08(B)(2)	reasonably available control measures (see sections A.I.2.f through A.I.2.i)

2. Additional Terms and Conditions

2.a The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

paved roadways:

1 - main entrance: road west to M&E office, main entrance, by 12" mill to hot metal bridge, truck hopper around stripper building to WQCC to Trump Rd. and around #5 steel conditioning. (Representative Paved Roadway)
2 - west end of plant
3 - road between #4 steel conditioning and #2 steel conditioning
4 - road to 8" mill
6 - road between bottom pour and 35" mill
8 - road to #4 and #3 melt shop
9 - north side #3 melt shop, small stretch east
10 - east side of #4 melt shop
11 - southeast side of #4 melt shop
18 - inventory storage area southwest end of plant near 8th Street
19 - inventory storage area west end of plant
22 - cast-roll (TM) facility

paved parking areas:

C - roll shop
D - carpenter shop
F - M&E office
H - WQCC (Water Quality Control Center)
J - main lot, west
K - machine shop
L - met/chem lab
M - main lot, east (Representative Paved Lot)
N - main lot, north
O - main lot, south
R - 35" mill, central
AA - melt shop
AH - cast roll (TM) facility

The paved road segments and parking areas listed above are shown schematically in the plot plan, dated 06/05/96, which is included as part of the permittee's Title V application.

2. Additional Terms and Conditions (continued)

2.b The unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

unpaved roadways:

00- road to truck scales (Representative Unpaved Roadway)
5 - WQCC to #1 steel cond.
7 - road between #4 baghouse and #4 melt shop
12 - mobile repair to Heckett Road
13 - boiler house
14 - slag landfill roads
15 - power house road, west
16 - power house road, east
18 - inventory storage area, southwest end of plant near 8th Street
20 - inventory storage area, northeast end of plant
21 - inventory storage area, north central end of plant

unpaved parking areas:

A - swing grind
B - bar finish
E - heat treat
G - heat treat/bar finish
I - 8" mill
P - 12" mill
Q - 35" mill, north
S - 35" mill, south
T - 35" mill, bury pits
U - safety/transportation
V - meter shop (Representative Unpaved Parking Area)
W - bottom pour
X - boiler house
Y - mobile repair
Z - chem lab
AB - teeming
AC - caster
AD - Airco
AE - #5 steel conditioning
AG - straddle buggy lot

The unpaved road segments and parking areas listed above are shown schematically in the plot plan, dated 06/05/96, which is included as part of the permittee's Title V application.

2.c All paved roadways and parking areas shall be swept and/or treated with water to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the above-mentioned visible emission limitation.

2.d The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

2.e The unpaved shoulders of all paved roadways shall be treated with water and/or any other suitable dust suppression chemicals to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the above-mentioned visible emission limitation.

2.f All unpaved roadways and parking areas shall be treated with water and/or any other suitable dust suppression chemicals to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the above-mentioned visible emission limitation.

2. Additional Terms and Conditions (continued)

2.g The control measures shall be implemented at frequencies that will minimize or eliminate visible emissions of fugitive dust generated by vehicular traffic and ensure compliance with the above-mentioned visible emission limitations, and the needed frequencies of implementation shall be determined by the permittee's inspections. It is further understood that on any specific day implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to minimize or eliminate visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the above-mentioned visible emission limitations.

2.h Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be considered as a paved roadway or parking area, and controlled with the control measure specified above for paved surfaces. Such unpaved roadway or parking area shall remain subject to the visible emission limitation for unpaved roadways and parking areas.

2.i Open-bodied vehicles transporting materials likely to become airborne, excluding the transporting of molten EAF slag, shall have such materials covered at all times if the control measure is necessary to minimize or eliminate visible emissions of fugitive dust.

II. Operational Restrictions

1. None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform inspections of the roadways and parking areas in accordance with the following schedule. Permittee shall determine the need to perform cleaning or other dust abatement methods by inspecting a typical representative of each surface type for roadways and parking areas. If fugitive dust or foreign material is found on a representative segment of roadway or parking surface, then the main group represented shall be inspected and treated as required. These representative segments must meet the approval of the Canton City Health Department, Air Pollution Control Division (CCHD, APCD).

1.a

paved roadways:	minimum required frequency:
1 (representative)	weekly
2	weekly
3	weekly
4	weekly
6	weekly
8	weekly
9	weekly
10	weekly
11	weekly
18	weekly
19	weekly
22	weekly

III. Monitoring and/or Record Keeping Requirements (continued)

1.b paved parking areas: minimum required frequency:

C	weekly
D	weekly
F	weekly
H	weekly
J	weekly
K	weekly
L	weekly
M (representative)	weekly
N	weekly
O	weekly
R	weekly
AA	weekly
AH	weekly

1.c unpaved roadways: minimum required frequency:

00 (representative)	weekly
5	weekly
7	weekly
12	weekly
13	weekly
14	weekly
15	weekly
16	weekly
18	weekly
20	weekly
21	weekly

1.d unpaved parking areas: minimum required frequency

A	weekly
B	weekly
E	weekly
G	weekly
I	weekly
P	weekly
Q	weekly
S	weekly
T	weekly
U	weekly
V (representative)	weekly
W	weekly
X	weekly
Y	weekly
Z	weekly
AB	weekly
AC	weekly
AD	weekly
AE	weekly
AG	weekly

III. Monitoring and/or Record Keeping Requirements (continued)

1.e The purpose of the inspections is to determine the need for implementing the control measures specified in section A.I.2. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to minimize or eliminate visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the above-mentioned visible emission limitations. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has(have) ended, except if the next required inspection is within one week.

1.f The permittee may, upon receipt of written approval from the CCHD, APCD, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to minimize or eliminate visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the above-mentioned visible emission limitations.

2. The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

3. The information required in section A.III.2.d, above, shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:

a. each day or week, as applicable, during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

2. The deviation reports shall be submitted in accordance with paragraph A.1.c. of the General Terms and Conditions.

3. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

There shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed 6 minutes during any 60-minute observation.

Applicable Compliance Method:

Compliance with the emission limitations for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.)

1.b Emission Limitation:

There shall be no visible fugitive particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed 13 minutes during any 60-minute observation period.

Applicable Compliance Method:

Compliance with the emission limitations for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.)

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
roadways and parking areas: approximately 16 miles of paved and unpaved roadways and 19 acres of paved and unpaved parking areas used by vehicles with 4 to 18 wheels		
paved roadways and parking areas (see section A.I.2.a)	OAC rule 3745-17-07(B)(8)(a)	There shall be no visible fugitive particulate emissions from any paved roadway or parking area greater than 10% opacity.
unpaved roadways and parking areas (see section A.I.2.b)	OAC rule 3745-17-07(B)(8)(a)	There shall be no visible fugitive particulate emissions from any unpaved roadway or parking area greater than 10% opacity.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Compliance with the emission limitations in section B.I.1 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

There shall be no visible particulate emissions from any paved roadway or parking area greater than 10% opacity as determined by the compliance method below.

Applicable Compliance Method:

Compliance shall be demonstrated using the procedures specified in 40 CFR Part 60, Appendix A, Method 9, and the modifications listed in OAC rule 3745-17-03(B)(3)(d). The visible emission limitation applies to each separate road segment and/or parking area identified in section A.I.2.a, and shall be performed for the representative road or parking area for each segment.

1.b Emission Limitation:

There shall be no visible particulate emissions from any unpaved road or parking area greater than 10% opacity as determined by the compliance method below.

Applicable Compliance Method:

Compliance shall be demonstrated using the procedures specified in 40 CFR Part 60, Appendix A, Method 9, and the modifications listed in OAC rule 3745-17-03(B)(3)(d). The visible emission limitation applies to each separate road segment and/or parking area identified in section A.I.2.b, and shall be performed for the representative road or parking area for each segment.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #3 & #4 Melt Shops Lime and Alloy Transfer (P068)

Activity Description: Lime and alloy transfer and conveying system

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
#3 and #4 melt shops lime and alloy transfer, belt transfer and conveying system with a maximum process weight rate of 125 tons/hour as follows:		
belt conveyor from truck hopper to chute with hood at drop point, chute to belt conveyor, belt conveyor to two-way chute with hood at drop point, two-way chute to belt conveyor with hood at drop point, belt conveyor to #4 melt shop trip car - all hoods are vented to the crossover conveyor baghouse (BGH21)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(3)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B) (Figure II)	10 lbs/hr of particulate emissions
		See A.I.2.e below.
two-way chute to shuttle conveyor with hood at drop point, shuttle conveyor to #3 melt shop chrome & lime bins with hood at drop point, chrome and lime bins to belt conveyor with hoods at drop points, belt conveyor to #3 melt shop initial charge car with hoods at drop point - all hoods vented to the #3 melt shop lime/alloy baghouse (BGH23)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(3)	See A.I.2.b below.
	OAC rule 3745-17-08(B)(3)	0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the exhaust stack, whichever is less stringent
		See A.I.2.c below.
#3 melt shop initial charge car to the #3 melt shop controlled by the #3 melt shop baghouse (BGH02) via canopy hoods	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(3)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	0.0052 grain of particulate emissions per dry standard cubic foot of exhaust gases
		See A.I.2.c below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
belt conveyor to #4 melt shop trip car, #4 melt shop trip car to the #4 melt shop lime/alloy bins, lime/alloy bins to the alloy weigh car with chute, alloy weigh car to the #4 initial charge car controlled by the #4 melt shop baghouse (BGH01) via building evacuation	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(3)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11 (Figure II)	10 lbs/hr of particulate emissions
		See A.I.2.e below.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 6-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

2.c The permittee shall minimize or eliminate visible particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall consist of the following:

i. localized hooding above the chute at the end of the belt conveyor coming from the truck hopper;

ii. localized hooding above the two-way chute at the end of the belt conveyor coming from the chute denoted above;

iii. localized hooding at the bottom of the two-way chute over the belt conveyor leading to the #4 melt shop trip car;

iv. building evacuation for the #4 melt shop trip car;

v. building evacuation vented to the #3 melt shop baghouse (BGH02) and the #4 melt shop baghouse (BGH01) for the initial charge car going to the #3 and #4 melt shops;

vi. localized hooding at the bottom of the two-way chute over the shuttle conveyor leading to the #3 melt shop chrome and lime bins, and vented to the #3 melt shop lime/alloy baghouse (BGH23);

vii. localized hooding at the bottom of the #3 melt shop chrome and lime bins over the belt conveyor leading to the #3 melt shop initial charge car, and vented to BGH23; and

viii. localized hooding over the #3 melt shop initial charge car, and vented to BGH23.

For the fugitive emissions captured and vented to the #3 melt shop baghouse (BGH02) the baghouse shall achieve an outlet emission rate of 0.0052 gr/dscf, and for fugitive emissions captured and vented to #3 melt shop lime/alloy baghouse (BGH23) the baghouse shall achieve an outlet emission rate of 0.030 gr/dscf (or no visible emissions from the exhaust stack, whichever is less stringent).

In each case mentioned above where localized hooding is used, the collection efficiency shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2. Additional Terms and Conditions (continued)

2.d The particulate emission rate for the #4 melt shop baghouse (BGH01) and the crossover conveyor baghouse (BGH21) is regulated under OAC rule 3745-17-11, since these baghouses were installed prior to 1972. The permittee shall comply with the more restrictive requirement of either Table 1 or Figure II. Based on calculations using an AP-42 emission factor from section 13.2.4, Figure II does not apply because the uncontrolled mass rate of emissions (UMRE) was determined to be less than 10 lbs/hr. Since the limit from Table 1, based on process weight rate, is greater than 10 lbs/hr, the allowable limit of 10 lbs/hr of particulate matter was established to ensure that Figure II will not become applicable to this emissions unit.

2.e Emissions units F003, P064, P068, P902, P903, and Z027 shall be vented to the #3 melt shop baghouse (BGH02). The total allowable outlet emission rate from this baghouse shall not exceed 0.0052 gr/dscf.

II. Operational Restrictions

1. The pressure drop across the baghouses shall be maintained within the manufacturer's recommended ranges of 4 to 8 inches of water for BGH01 and 2 to 9 inches of water for BGH02, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 6 months after issuance of this permit.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was previously established are no longer applicable.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across baghouses BGH01 and BGH02 while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis while the emissions unit is in operation.

Baghouses BGH21 and BGH23 are located in the rafters of the buildings and are not readily accessible; therefore, the pressure drop monitoring will not be required for these baghouses.

2. The permittee shall perform daily checks when the emissions unit is in operation during daylight hours and when the weather conditions allow, for any visible fugitive particulate emissions from any non-stack egress point from the building housing this emissions unit (e.g., windows, doors, roof monitors, etc.). The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible fugitive particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

III. Monitoring and/or Record Keeping Requirements (continued)

The permittee may, upon receipt of written approval from the CCHD, APCD, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible emissions check frequencies would not be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that:

a. identify all days during which any visible fugitive and/or stack particulate emissions were observed from any non-stack egress point serving this emissions unit and/or from the stacks serving baghouses BGH21 or BGH23; and

b. describe any corrective actions taken to minimize or eliminate the visible fugitive and/or stack particulate emissions.

These reports shall be submitted to the CCHD, APCD by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit quarterly pressure drop deviation (excursion) reports for baghouses BGH01 and BGH02 that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above, as well as the corrective actions that were taken to achieve compliance.

3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This limitation applies to the stack emissions from all four baghouses (BGH01, BGH02, BGH21, and BGH23).

1.b Emission Limitation:

20% opacity as a 6-minute average for fugitive emissions

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

V. Testing Requirements (continued)

1.c Emission Limitation:

0.0052 grain of particulate emissions per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

This limitation applies to stack emissions from the #3 melt shop baghouse (BGH02). If required by the CCHD, APCD, compliance shall be demonstrated using Test Methods 1 through 5 in 40 CFR, Part 60, Appendix A; otherwise, compliance shall be demonstrated by the absence of any visible emissions from the baghouses serving this emissions unit and using Test Method 22 in 40 CFR, Part 60, Appendix A.

1.d Emission Limitation:

0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the exhaust stack, whichever is less stringent

Applicable Compliance Method:

This limitation applies to the #3 melt shop lime/alloy baghouse (BGH23). If required by the Canton City Health Department, Air Pollution Control Division, compliance shall be demonstrated using Test Methods 1 through 5 in 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(7); otherwise, compliance shall be demonstrated by the absence of any visible emissions from the baghouses serving this emissions unit and using Test Method 22 in 40 CFR, Part 60, Appendix A.

1.e Emission Limitation:

10 lbs/hr of particulate emissions

Applicable Compliance Method:

This condition applies to the stack emissions from the #4 melt shop baghouse (BGH01) and the crossover conveyor baghouse (BGH21). If required by the CCHD, APCD, compliance shall be demonstrated using Test Methods 1 through 5 in 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10); otherwise, compliance shall be demonstrated by the absence of any visible emissions from the baghouses serving this emissions unit and using Test Method 22 in 40 CFR, Part 60, Appendix A.

2. If required, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates from the outlets of baghouses BGH01, BGH02, BGH21, and BGH23, and the visible particulate emission limitations.

b. The following parameters shall also be monitored and recorded during the emission testing: the pressure drop across the baghouses.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and

ii. for the mass emission rate for particulates, Method 5 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions units identified in section A.I.2.e are operating at or near their maximum capacities, unless otherwise specified or approved by the CCHD, APCD.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #4 Grinder at #5 Steel Conditioning (P070)

Activity Description: Steel billet grinder

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
#4 grinder at #5 steel conditioning controlled by a settling chamber (SCHO3) and a baghouse (BGH10) and vented inside the building	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B)	35.8 lbs/hr of particulate emissions See A.I.2.d below.
	OAC rule 3745-31-05(A)(3) (PTI 15-054)	See A.I.2.e below.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

2.c The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall include the following: localized hooding over the emissions unit.

The collection efficiency shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2.d Emissions units P070, P071, P074, P075, P076, and P078 are similar emissions units; therefore, the total uncontrolled mass rate of emissions from all units shall be used to determine the allowable emission limit from OAC rule 3745-17-11, Figure II. From a 12/17/87 stack test for one unit, the UMRE was determined to be 99.26 lbs/hr of particulate emissions. The total UMRE is therefore 595.56 lbs/hr of particulate emissions. Using Curve P-1 from Figure II, the total allowable emission rate was determined to be 35.8 lbs/hr for all 6 grinding operations combined.

2. Additional Terms and Conditions (continued)

2.e In accordance with PTI 15-054, BAT was determined to be compliance with all applicable rules.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 3 to 8 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 6 months after permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was previously established are no longer applicable.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

2. The permittee shall perform daily checks when the emissions unit is in operation during daylight hours and when the weather conditions allow, for any visible fugitive particulate emissions from any non-stack egress point from the building housing this emissions unit (e.g., windows, doors, roof monitors, etc.). The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible fugitive particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

The permittee may, upon receipt of written approval from the CCHD, APCD, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible emissions check frequencies would not be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

IV. Reporting Requirements (continued)

2. The permittee shall submit semiannual written reports that:

a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and

b. describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

35.8 lbs/hr of particulate emissions - combined total for emissions units P070, P071, P074, P075, P076, and P078

Applicable Compliance Method:

If required, compliance shall be determined through emission tests performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

2. If required, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitations.

b. The following parameters shall also be monitored and recorded during the emissions testing: the pressure drop across the baghouse.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and

ii. for the hourly mass emission rate for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #5 Grinder at #5 Steel Conditioning (P071)

Activity Description: Steel billet grinder

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
#5 grinder at #5 steel conditioning controlled by a settling chamber (SCHO4) and a baghouse (BGH11) and vented inside the building	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B)	35.8 lbs/hr of particulate emissions See A.I.2.d below.
	OAC rule 3745-31-05(A)(3) (PTI 15-055)	See A.I.2.e below.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

2.c The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall include the following: localized hooding over the emissions unit.

The collection efficiency shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2.d Emissions units P070, P071, P074, P075, P076, and P078 are similar emissions units; therefore, the total uncontrolled mass rate of emissions from all units shall be used to determine the allowable emission limit from OAC rule 3745-17-11, Figure II. From a 12/17/87 stack test for one unit, the UMRE was determined to be 99.26 lbs/hr of particulate emissions. The total UMRE is therefore 595.56 lbs/hr of particulate emissions. Using Curve P-1 from Figure II, the total allowable emission rate was determined to be 35.8 lbs/hr for all 6 grinding operations combined.

2. Additional Terms and Conditions (continued)

2.e In accordance with PTI 15-055, BAT was determined to be compliance with all applicable rules.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 3 to 8 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 6 months after permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was previously established are no longer applicable.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

2. The permittee shall perform daily checks when the emissions unit is in operation during daylight hours and when the weather conditions allow, for any visible fugitive particulate emissions from any non-stack egress point from the building housing this emissions unit (e.g., windows, doors, roof monitors, etc.). The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible fugitive particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

The permittee may, upon receipt of written approval from the CCHD, APCD, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible emissions check frequencies would not be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

IV. Reporting Requirements (continued)

2. The permittee shall submit semiannual written reports that:

a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and

b. describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

35.8 lbs/hr of particulate emissions - combined total for emissions units P070, P071, P074, P075, P076, and P078

Applicable Compliance Method:

If required, compliance shall be determined through emission tests performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

2. If required, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitations.

b. The following parameters shall also be monitored and recorded during the emissions testing: the pressure drop across the baghouse.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and

ii. for the hourly mass emission rate for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #12 Grinder at #5 Steel Conditioning (P076)

Activity Description: Steel billet grinder

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
#12 grinder at #5 steel conditioning controlled by a settling chamber (SCHO9) and a baghouse (BGH16) and vented outside the building	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B)	35.8 lbs/hr of particulate emissions See A.I.2.d below.
	OAC rule 3745-31-05(A)(3) (PTI 15-055)	See A.I.2.e below.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

2.c The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall include the following: localized hooding over the emissions unit.

The collection efficiency shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2.d Emissions units P070, P071, P074, P075, P076, and P078 are similar emissions units; therefore, the total uncontrolled mass rate of emissions from all units shall be used to determine the allowable emission limit from OAC rule 3745-17-11, Figure II. From a 12/17/87 stack test for one unit, the UMRE was determined to be 99.26 lbs/hr of particulate emissions. The total UMRE is therefore 595.56 lbs/hr of particulate emissions. Using Curve P-1 from Figure II, the total allowable emission rate was determined to be 35.8 lbs/hr for all 6 grinding operations combined.

2. Additional Terms and Conditions (continued)

2.e In accordance with PTI 15-055, BAT was determined to be compliance with all applicable rules.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 3 to 8 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 6 months after permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was previously established are no longer applicable.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

2. The permittee shall perform daily checks when the emissions unit is in operation during daylight hours and when the weather conditions allow, for any visible fugitive particulate emissions from any non-stack egress point from the building housing this emissions unit (e.g., windows, doors, roof monitors, etc.). The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible fugitive particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

The permittee may, upon receipt of written approval from the CCHD, APCD, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible emissions check frequencies would not be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

IV. Reporting Requirements (continued)

2. The permittee shall submit semiannual written reports that:

a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and

b. describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

35.8 lbs/hr of particulate emissions - combined total for emissions units P070, P071, P074, P075, P076, and P078

Applicable Compliance Method:

If required, compliance shall be determined through emission tests performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

2. If required, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitations.

b. The following parameters shall also be monitored and recorded during the emissions testing: the pressure drop across the baghouse.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and

ii. for the hourly mass emission rate for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #14 Grinder at #5 Steel Conditioning (P078)

Activity Description: Steel billet grinder

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
#14 grinder at #5 steel conditioning controlled by a settling chamber (SCH11) and a baghouse (BGH18) and vented inside the building	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B)	31.8 lbs/hr of particulate emissions See A.I.2.d below.
	OAC rule 3745-31-05(A)(3) (PTI 15-055)	See A.I.2.e below.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2.b Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

2.c The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall include the following: localized hooding over the emissions unit.

The collection efficiency shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2.d Emissions units P070, P071, P074, P076, and P078 are similar emissions units; therefore, the total uncontrolled mass rate of emissions from all units shall be used to determine the allowable emission limit from OAC rule 3745-17-11, Figure II. From a 12/17/87 stack test for one unit, the UMRE was determined to be 99.26 lbs/hr of particulate emissions. The total UMRE is therefore 496.3 lbs/hr of particulate emissions. Using Curve P-1 from Figure II, the total allowable emission rate was determined to be 31.8 lbs/hr for all 5 grinding operations combined.

2. Additional Terms and Conditions (continued)

2.e In accordance with PTI 15-055, BAT was determined to be compliance with all applicable rules.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 3 to 8 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 6 months after permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was previously established are no longer applicable.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

2. The permittee shall perform daily checks when the emissions unit is in operation during daylight hours and when the weather conditions allow, for any visible fugitive particulate emissions from any non-stack egress point from the building housing this emissions unit (e.g., windows, doors, roof monitors, etc.). The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible fugitive particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

The permittee may, upon receipt of written approval from the CCHD, APCD, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible emissions check frequencies would not be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

IV. Reporting Requirements (continued)

2. The permittee shall submit semiannual written reports that:

a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and

b. describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

31.8 lbs/hr of particulate emissions - combined total for emissions units P070, P071, P074, P076, and P078

Applicable Compliance Method:

If required, compliance shall be determined through emission tests performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

2. If required, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitations.

b. The following parameters shall also be monitored and recorded during the emissions testing: the pressure drop across the baghouse.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. for visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A; and

ii. for the hourly mass emission rate for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the CCHD, APCD.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: LRS #4 Melt Shop (P106)

Activity Description: Ladle Metallurgy/Refining Station in #4 Melt Shop

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
ladle metallurgy/refining station in #4 melt shop controlled by a baghouse (BGH01)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-11(B)	See A.I.2.c below.
	40 CFR Part 52.1881(b)(27)(viii)	Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.
	OAC rule 3745-31-05(A)(3) (PTI 15-234)	0.005 grain of particulate emissions per dry standard cubic foot of exhaust gases See A.I.2.b below.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2.b The particulate emissions from this emissions unit shall be controlled by direct evacuation and canopy hoods vented to the baghouse serving the #4 melt shop. This limitation is in accordance with the federally enforceable Permit to Install 15-234 which was issued final on July 31, 1984.

2.c The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the manufacturer's recommended range of 4 to 8 inches of water, while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established. The appropriate pressure drop range shall be determined and submitted in writing to the Canton City Health Department, Air Pollution Control Division (CCHD, APCD) within 6 months after permit issuance.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was previously established are no longer applicable.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis while the emissions unit is in operation.

2. The permittee shall perform daily checks when the emissions unit is in operation during daylight hours and when the weather conditions allow, for any visible fugitive particulate emissions from any non-stack egress point from the building housing this emissions unit (e.g., windows, doors, roof monitors, etc.). The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible fugitive particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

The permittee may, upon receipt of written approval from the CCHD, APCD, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible emissions check frequencies would not be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above, as well as the corrective actions that were taken to achieve compliance.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

3. The permittee shall submit semiannual written reports that:

a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and

b. describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Sulfur dioxide emissions shall not exceed 80.0 lbs/ton of actual process weight input.

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

1.c Emission Limitation:

0.005 grain of particulate emissions per dry standard cubic foot of exhaust gases

Applicable Compliance Method:

If required, compliance shall be determined through emission tests performed using Methods 1 through 5 of 40 CFR Part 60, Appendix A.

2. If required, the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and particulate matter, and the visible emission limitation.

b. The following parameters shall also be monitored and recorded during the emission testing: the process weight rate (in tons); and the pressure drop across the baghouse.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission limitations:

i. for the visible particulate emissions, Method 9 of 40 CFR Part 60, Appendix A;

ii. for the emission rate for SO_2, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A; and

iii. for the grain loading mass emission rate for particulate emissions, Methods 1 through 5 of 40 CFR Part 60, Appendix A.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the CCHD, APCD.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the appropriate CCHD, APCD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

NOTE: The testing shall be performed on an "if required" basis due to the fact that this emissions unit is operated as a backup unit to the Ladle Metallurgical Facility (LMF). Typically, this unit will be operated for one heat every other month, if needed, to perform maintenance on the LMF. A stack test was performed on the LMF in 1999 which verified compliance with the PM, PM10, and SO2 emission limitations. If this emissions unit (P106) begins to operate on a full-time basis, regular periodic stack testing will be required.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
ladle metallurgy/refining station in #4 melt shop controlled by a baghouse (BGH01)	OAC rule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 1,099 lbs/hr.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Emission Limitation:

Sulfur dioxide emissions shall not exceed 1,099 lbs/hr.

Applicable Compliance Method:

Compliance with this limitation will be assumed due to the high allowable emission limitation and the relatively low amount of sulfur dioxide emitted from the process.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: CRP - Ladle Metallurgical Facility (LMF) (P123)

Activity Description: Ladle Metallurgical Facility

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
ladle metallurgy facility (LMF) controlled with a baghouse (BGH20)	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-11(B)	See A.I.2.a below.
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.a below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-31-05(A)(3) (PTI 15-1314) and OAC rules 3745-31-10 through 3745-31-20	0.005 grain of particulate emissions per dry standard cubic foot of exhaust gases 3.12 lbs/hr of particulate emissions (based on 72,800 dry standard cubic feet of exhaust gases per minute) 13.67 tpy of particulate emissions 2.44 lbs/hr of PM10 10.69 tpy of PM10 See A.I.2.b below. Visible particulate emissions shall not exceed 5% opacity as a 6-minute average. 525 lbs of sulfur dioxide (SO2) in any 3-hour period based upon a rolling, 3-hour summation of the hourly emissions 1,748 lbs of SO2 in any 24-hour period based upon a rolling, 24-hour summation of the hourly emissions 318.94 tons of SO2 in any 1-year period based upon a rolling, 12-month summation of the hourly emissions See A.II.3, A.II.4 and A.II.5 below for sulfur usage restrictions. See A.I.2.c below.

2. Additional Terms and Conditions

2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to the best available technology determination required pursuant to OAC rule 3745-31-05.

2.b The baghouse serving this emissions unit also serves emissions units P128 and P129. The above particulate emission limitations are for the combined emissions from all 3 of these emissions units (P123, P128, and P129).

2.c The terms and conditions for this emissions unit were established in the federally enforceable PTI 15-1314. The BAT determination for this emissions unit includes compliance with the Prevention of Significant Deterioration (PSD) requirements.

II. Operational Restrictions

1. The LMF shall be equipped with a fabric filter baghouse control system which shall be designed to achieve maximum particulate emission rate of 0.005 grain per dry standard cubic foot of exhaust gases (based on an average flow rate of 72,800 dry standard cubic feet of exhaust gases per minute).

2. The pressure drop across the baghouse shall be maintained within the range of 3 to 16 inches of water while the emissions unit is in operation.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was previously established are no longer applicable.

3. The SO2 mass emission limitations for this emissions unit and the sulfur addition restrictions are based on an emission factor of 0.80 lb of SO2 emissions/lb of sulfur added to the steel, as determined by mass balance and based on the assumption that all the excess sulfur is converted to SO2. Some additional SO2 is also generated from the sulfur already present in the steel prior to sulfur additions at this emissions unit. This SO2 emission factor may be adjusted based on emission tests performed for this emissions unit.

4. All sulfur additions in the LMF shall be done by injecting the material under the surface of the molten steel. This may include, but is not limited to, wire injection.

5. Based on the emission factor of 0.8 lb of SO2/lb of sulfur added, the following sulfur addition rates shall not be exceeded:

a. no more than 656 pounds of sulfur additions in any 3-hour period;

b. no more than 2,185 pounds of sulfur additions in any 24-hour period; and

c. no more than 399 tons of sulfur additions in any rolling, 12-month period.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain hourly records of the following information for this emissions unit:

a. hourly records of sulfur additions;

b. the rolling, 3-hour rates of sulfur additions; and

c. the rolling, 24-hour rates of sulfur additions.

2. The permittee shall maintain monthly records of the total sulfur additions during the calendar month and the rolling, 12-month summation of the sulfur addition figures.

3. The permittee shall operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. each rolling, 3-hour period during which the sulfur addition rate in this emissions unit exceeded 656 pounds, and the actual sulfur usage for each such 3-hour period;

b. each rolling, 24-hour period during which the sulfur addition rate in this emissions unit exceeded 2,185 pounds, and the actual sulfur usage for each such 24-hour period;

c. each rolling, 12-month period during which the sulfur addition rate in this emissions unit exceeded 399 tons, and the actual sulfur usage for each such 12-month period; and

d. all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

2. The permittee shall also submit annual reports that specifiy the total particulate, PM10, and SO2 emissions, in tons, from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

3. The permittee shall submit the required deviation (excursion) reports in accordance with Part I - General Term and Condition A.1.c.

4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitations:

0.005 grain of particulate emissions per dry standard cubic foot of exhaust gases and 3.12 lbs/hr of particulate emissions (combined total for emissions units P123, P128, and P129)

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2 (40 CFR Part 60, Appendix A, Methods 1 through 5).

1.b Emission Limitation:

2.44 lbs/hr of PM10

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2.

1.c Emission Limitation:

5% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

V. Testing Requirements (continued)

1.d Emission Limitations:

525 lbs of SO2 in any 3-hour period based upon a rolling, 3-hour summation of the hourly emissions

1,748 lbs of SO2 in any 24-hour period based upon a rolling, 24-hour summation of the hourly emissions

318.94 tons of SO2 in any 1-year period based upon a rolling, 12-month summation of the hourly emissions

Applicable Compliance Method:

Compliance may be demonstrated through the records required pursuant to section A.III.1 and the emission factor specified in section A.II.3.

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2 (40 CFR Part 60, Appendix A, Methods 1 through 4 and 6).

1.e Emission Limitations:

13.67 tpy of particulate emissions (combined total for emissions units P123, P128, and P129)
10.69 tpy of PM10

Applicable Compliance Method:

The ton per year emission limitations were developed by multiplying the lbs/hr emission limitations by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitations, compliance will also be shown with the annual emission limitations.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and SO2.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

i. for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A; and

ii. for SO2, Methods 1 through 4 and 6, of 40 CFR Part 60, Appendix A.

d. The particulate emission tests shall be conducted while emissions units P123, P128 and P129 are operating at or near their maximum capacities unless otherwise specified or approved by the CCHD, APCD. The SO2 test(s) shall be conducted while this emissions unit is operating at or near its maximum capacity unless otherwise specified or approved by the CCHD, APCD.

e. The parametric monitoring requirements established in sections A.III.1 and A.III.5 shall be checked during the emission tests as well as the amount, in pounds, of the sulfur addition.

f. If the test results show that the particulate emission rate exceeded the PM10 emission limitation, then the permittee shall perform a particle size distribution determination, while emissions units P123, P128 and P129 are operating at or near their maximum capacities, to determine the fraction of the PM10 present in the sample which was collected via Method 5. Please note that in addition to the particle size distribution determination, the particulate emissions collected in the impinger section of the Method 5 sampling train must also be evaluated when determining compliance with the PM10 emission limitation.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the appropriate CCHD, APCD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
ladle metallurgy facility (LMF) controlled with a baghouse (BGH20)	OAC rule 3745-18-06(E)(1)	See B.I.2.a below.

2. Additional Terms and Conditions

2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to the best available technology determination required pursuant to OAC rule 3745-31-05.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: CRP - Reheat Furnace (P126)

Activity Description: Natural Gas fired reheat furnace and rolling mill

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Bloom reheat furnace with a capacity of 196.2 mmBtu/hr; fired with natural gas	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-11(B)	See A.I.2.a below.
	OAC rule 3745-31-05(A)(3) (PTI 15-1314) and OAC rules 3745-31-10 through 3745-31-20	Visible particulate emissions shall not exceed 5% opacity as a 6-minute average. 1 lb/hr of particulate emissions 4.4 tpy of particulate emissions 0.12 lb/hr of sulfur dioxide (SO2) 0.52 tpy of SO2 0.112 lb of nitrogen oxides (NOx) per mmBtu of actual heat input 22 lbs/hr of NOx 96.2 tpy of NOx 7.8 lbs/hr of carbon monoxide (CO) 34.3 tpy of CO 1.1 lbs/hr of volatile organic compounds (VOC) 4.82 tpy of VOC See A.I.2.b below.
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to the best available technology determination required pursuant to OAC rule 3745-31-05.

2. Additional Terms and Conditions (continued)

2.b The terms and conditions of this permit were established in the federally enforceable Permit to Install 15-1314 issued on June 17, 1998. The BAT determination includes compliance with the Prevention of Significant Deterioration requirements.

II. Operational Restrictions

1. The permittee shall only burn natural gas as fuel in this emissions unit.

2. The permittee shall only operate this emissions unit with low NOx burners rated at 0.112 lb of NOx per mmBtu or lower.

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

1. Compliance with the emission limitations in section A.I.1 of the terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

5% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

1.b Emission Limitation:

1 lb/hr of particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the AP-42 particulate emission factor obtained from Section 1.4, Table 1.4-2 (7/98) of 1.9 lbs of particulates/million cubic feet of natural gas by the emissions unit's maximum hourly natural gas firing capacity (converts to 0.4 lb/hr of particulates). If required, compliance shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

1.c Emission Limitation:

0.12 lb/hr of SO_2

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the AP-42 SO_2 emission factor obtained from Section 1.4, Table 1.4-1 (2/98) of 0.6 lb of SO_2 per million cubic feet by the emissions unit's maximum hourly natural gas firing capacity (converts to 0.12 lb/hr of SO_2). If required, compliance shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

V. Testing Requirements (continued)

1.d Emission Limitations:

0.112 lb of NOx per mmBtu of actual heat input
22 lbs/hr of NOx

Applicable Compliance Method:

Emission tests conducted on January 19, 1996 showed an average NOx emission rate of only 2 lbs/hr. If required, compliance shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

1.e Emission Limitation:

7.8 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying an emission factor of 9 lbs of CO per million cubic feet by the emissions unit's maximum hourly natural gas firing capacity (converts to 1.8 lbs/hr of CO). The emission factor was obtained from testing of a 228 mmBtu/hr Bloom reheat furnace at Timken Steel in March of 1999. If required, compliance shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

1.f Emission Limitation:

1.1 lb/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the AP-42 VOC emission factor obtained from Section 1.4, Table 1.4-2 (7/98) of 5.5 lbs of VOC per million cubic feet by the emissions unit's maximum hourly natural gas firing capacity (converts to 1.1 lbs/hr of VOC). If required, compliance shall be determined through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 or 25A, as appropriate.

1.g Emission Limitations:

96.2 tpy of NOx
34.3 tpy of CO
4.4 tpy of particulate emissions
4.82 tpy of VOC
0.52 tpy of SO2

Applicable Compliance Method:

The tpy emission limitations were developed by multiplying the lb(s)/hr emission limitations by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitations, compliance will also be shown with the annual emission limitations.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Bloom reheat furnace with a capacity of 196.2 mmBtu/hr; fired with natural gas	OAC rule 3745-18-06(E)(1)	See B.I.2.a below.

2. Additional Terms and Conditions

2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to the best available technology determination required pursuant to OAC rule 3745-31-05.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: CRP - Alloy Truck Dumping (P128)

Activity Description: Alloy Truck Dumping

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
cast-roll alloy truck dumping, controlled by the LMF baghouse (BGH20)	OAC rule 3745-31-05(A)(3) (synthetic minor PTI 15-1093)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-17-07(A)	See A.I.2.c below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.d below.
	OAC rule 3745-17-08(B)	See A.I.2.e below.
	OAC rule 3745-17-11(B)	See A.I.2.d below.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any fugitive dust source shall not exceed 10% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

2.b This emissions unit shall be vented to the LMF (P123) fabric filter baghouse (BGH20). The total allowable emission rate from the exhaust stack of the LMF baghouse is restricted to 0.005 gr/dscf and 13.67 tpy of particulate emissions.

2.c Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2.d The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to the best available technology requirements specified in OAC rule 3745-31-05.

2.e The permittee shall minimize or eliminate visible particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall include the following: localized hooding at the alloy dump station.

The collection efficiency shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 3 to 16 inches of water while the emissions unit is in operation.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was previously established are no longer applicable.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis while the emissions unit is in operation.

2. The permittee shall perform daily checks when the emissions unit is in operation during daylight hours and when the weather conditions allow, for any visible fugitive particulate emissions from any non-stack egress point from the building housing this emissions unit (e.g., windows, doors, roof monitors, etc.). The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible fugitive particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

The permittee may, upon receipt of written approval from the CCHD, APCD, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible emissions check frequencies would not be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above, as well as the corrective actions that were taken to achieve compliance.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

IV. Reporting Requirements (continued)

3. The permittee shall submit semiannual written reports that:

a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and

b. describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with USEPA Method 9 from 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

10% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

Compliance shall be determined using USEPA Method 9 from 40 CFR Part 60, Appendix A. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

The total allowable emission rate from the exhaust stack of the LMF baghouse is restricted to 0.005 grain of particulate emissions per dry standard cubic foot of exhaust gases (combined for emissions units P123, P128, and P129)

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2 (40 CFR Part 60, Appendix A, Methods 1 through 5).

1.d Emission Limitation:

13.67 tpy of particulate emissions (combined total for emissions units P123, P128, and P129)

Applicable Compliance Method:

The allowable emission limitation of 0.005 gr/dscf converts to an emission rate of 3.12 lbs/hr. The tpy emission limitation was developed by multiplying the lbs/hr emission limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance will also be shown with the annual emission limitation.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Method 5 of 40 CFR Part 60, Appendix A.

d. The particulate emission tests shall be conducted while emissions units P123, P128, and P129 are operating at or near their maximum capacities unless otherwise specified or approved by the CCHD, APCD.

e. The following parameter shall also be monitored during the emission tests: pressure drop across the baghouse.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the appropriate CCHD, APCD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: CRP - Alloy Conveying and Silos (P129)

Activity Description: Alloy Conveying and Silos

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
cast-roll alloy conveying and silos, controlled by the LMF baghouse (BGH20)	OAC rule 3745-31-05(A)(3) (synthetic minor PTI 15-1093)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-17-07(A)	See A.I.2.c below.
	OAC rule 3745-17-07(B)(1)	See A.I.2.d below.
	OAC rule 3745-17-08(B)	See A.I.2.e below.
	OAC rule 3745-17-11(B)	See A.I.2.d below.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any fugitive dust source shall not exceed 10% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

2.b This emissions unit shall be vented to the LMF (P123) fabric filter baghouse (BGH20). The total allowable emission rate from the exhaust stack of the LMF baghouse is restricted to 0.005 gr/dscf and 13.67 tpy of particulate emissions.

2.c Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2.d The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to the best available technology requirements specified in OAC rule 3745-31-05.

2.e The permittee shall minimize or eliminate visible particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall include the following: localized hooding at each transfer point on the conveying system.

The collection efficiency shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 3 to 16 inches of water while the emissions unit is in operation.

The permittee may petition the CCHD, APCD for reestablishment of the pressure drop range provided the permittee can demonstrate to the CCHD, APCD's satisfaction that the operating conditions upon which the pressure drop range was previously established are no longer applicable.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis while the emissions unit is in operation.

2. The permittee shall perform daily checks when the emissions unit is in operation during daylight hours and when the weather conditions allow, for any visible fugitive particulate emissions from any non-stack egress point from the building housing this emissions unit (e.g., windows, doors, roof monitors, etc.). The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible fugitive particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

The permittee may, upon receipt of written approval from the CCHD, APCD, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements. Such modified visible emissions check frequencies would not be considered a minor or significant modification that would be subject to the Title V permit modification requirements in paragraphs (C)(1) and (C)(3) of OAC rule 3745-77-08.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above, as well as the corrective actions that were taken to achieve compliance.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

IV. Reporting Requirements (continued)

3. The permittee shall submit semiannual written reports that:

a. identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point serving this emissions unit; and

b. describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

Compliance shall be determined through visible emissions observations performed in accordance with USEPA Method 9 from 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

10% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

Compliance shall be determined using USEPA Method 9 from 40 CFR Part 60, Appendix A. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

1.c Emission Limitation:

The total allowable emission rate from the exhaust stack of the LMF baghouse is restricted to 0.005 grain of particulate emissions per dry standard cubic foot of exhaust gases (combined for emissions units P123, P128, and P129)

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2 (40 CFR Part 60, Appendix A, Methods 1 through 5).

1.d Emission Limitation:

13.67 tpy of particulate emissions (combined total for emissions units P123, P128, and P129)

Applicable Compliance Method:

The allowable emission limitation of 0.005 gr/dscf converts to an emission rate of 3.12 lbs/hr. The tpy emission limitation was developed by multiplying the lbs/hr emission limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance will also be shown with the annual emission limitation.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Method 5 of 40 CFR Part 60, Appendix A.

d. The particulate emission tests shall be conducted while emissions units P123, P128, and P129 are operating at or near their maximum capacities unless otherwise specified or approved by the CCHD, APCD.

e. The following parameter shall also be monitored during the emission tests: pressure drop across the baghouse.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the appropriate CCHD, APCD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #7 EAF - #4 Melt Shop (P905)

Activity Description: Electric arc steel making furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
No. 7 EAF modification. This electric arc furnace is being modified to increase production from 85 tons per hour to 183.3 tons steel/hr. This emissions unit is controlled with the No. 4 Melt Shop evacuation control (DEC) and a building evacuation system for capture and a baghouse for control.	OAC rule 3745-31-05(A)(3) (PTI 15-01591)	Lead emissions from the control device shall not exceed 0.06 lb/hr and 0.240 tpy. Mercury (Hg) emissions from the control device shall not exceed 0.061 lb/hr and 0.27 tpy. Visible particulate emissions shall not exceed 3% opacity as a 6-minute average as measured at the discharge stack of the No. 4 Melt Shop baghouse when the emissions unit is operating. See section A.I.2.d. Visible particulate emissions of fugitive dust shall not exceed 6% opacity as a 6-minute average from the roof monitors (vents) and openings of the No. 4 Melt Shop building, including doors, windows, etc. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-10 through 20 and 3745-31-21 through 27.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rules 3745-31-21 thru 27	Nitrogen oxides (NOx) emissions shall not exceed 36.7 lbs/hr and 160.75 tpy. (The mass emission rates specified above are based on an emission factor of 0.2 lb NOx/ton steel produced.) NOx emissions shallnot exceed 0.35 lb/ton of steel produced. Volatile organic compounds (VOC) emissions shall not exceed 18.33 lbs/hr and 62.24 tpy. VOC emissions shall not exceed 0.1 lb/ton of steel produced. See section A.I.2.b. The filterable PM10 emissions rate from the control device serving this emissions unit shall not exceed 28.7 lbs PM10 per hour and 125.6 tons PM10 per year. The total PM10/PM2.5 emissions rate, which includes filterable and condensible PM10 emissions, from the control device serving this emissions unit shall not exceed 100.6 lbs PM10/PM2.5 per hour and 440.8 tons PM10/PM2.5 per year. The filterable PM10 grain loading as measured at the discharge of the No. 4 baghouse serving this emissions unit shall not exceed 0.0014 grain/dscf. The total PM10/PM2.5 grain loading, which includes filterable and condensible PM10, as measured at the discharge of the No. 4 baghouse serving this emissions unit shall not exceed 0.0048 grain/dscf. See sections A.I.2.a and A.I.2.b.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rules 3745-31-10 thru 20	See section A.I.2.c. The PM emissions rate from the control device serving this emissions unit shall not exceed 37.7 lbs PM per hour and 165.3 tons PM per year. The filterable PM grain loading as measured at the discharge of the No. 4 baghouse serving this emissions unit shall not exceed 0.0018 grain/dscf. Sulfur dioxide (SO2) emissions shall not exceed 12.83 lbs/hr and 45.0 tpy SO2 emissions shall not exceed 0.07 lb/ton of steel produced. Carbon monoxide (CO) emissions shall not exceed 366.50 lbs/hr and 1285 tpy. CO emissions shall not exceed 2 lbs/ton of steel produced.
	OAC rule 3745-17-08 OAC rule 3745-17-07(A)(1) OAC rule 3745-17-11 OAC rule 3745-18-06(E)(1) 40 CFR Part 60, Subpart AAa	The emission limitations specified by these applicable rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	40 CFR Part 64	See sections A.I.2.d, A.II.3, A.II.4, A.III.5, A.III.6, A.III.7, A.IV.1, A.IV.2 and A.IV.3. [In restating the applicable requirements of 40 CFR Part 64, it is not the Agency's intent to make these requirements, in any way, more stringent than the rules.]

2. Additional Terms and Conditions

2.a The PM10/PM2.5 emissions from this emissions unit shall be collected and controlled by the No. 4 Melt Shop evacuation system baghouse. This evacuation system is used to control PM and PM10 emissions from emission units P907, P905, P106, P160, F009, and parts of P068:

i. The baghouse shall have a minimum control efficiency of 99% for PM and filterable PM10 emissions.

ii. The evacuation system shall achieve and maintain a minimum capture efficiency that is sufficient to prevent violations of the 6% opacity emission limitation for fugitive emissions from the melt shop.

iii. The visible particulate emissions from the dust handling system serving this emissions unit shall not exceed 10% opacity as a 6-minute average.

iv. In adherence with U.S. EPA's interim guidance regarding new source review for sources of PM2.5 emissions, projected PM10 emissions are to be used as a surrogate for PM2.5 emissions. Therefore, compliance with PM10 emissions will suffice for compliance with PM 2.5 emissions.

2.b The permittee shall employ the Lowest Achievable Emission Rate (LAER) specified in section A.I.1 and as defined in OAC rule 37445-31-01(FFF) as an emission limitation for NOx and VOC. LAER for NOx consists of the operation of the furnace to minimize NOx generation, the use of low NOx/oxyfuel burner technology and oxygen lances to provide supplemental energy to heats, and emission limitations for NOx as specified in section A.I.1. LAER for VOC consists of the continued use of the company scrap management plan and emission limitations specified in section A.I.1. The mass rate of emissions for NOx and VOC were developed using the emission factors of 0.2 lb NOx/ton of steel produced and 0.1 lb VOC/ton of steel produced, respectively. BAT emission limitations are as stringent as LAER.

The permittee shall also employ LAER for PM2.5. Regulations implementing the Fine Particulate NAAQS (PM2.5) have not been finalized yet. USEPA has provided guidance which specifies that permittees must use the PM10 regulatory program as a surrogate for PM2.5. Therefore, pursuant to this guidance, this project must also satisfy the LAER requirements for PM10.

2.c The permittee shall employ the Best Available Control Technology (BACT) as defined in OAC rule 3745-31-01(S) for PM10/PM2.5, SO2 and CO. BAT emission limitations are as stringent as BACT. BACT for this emissions unit has been demonstrated to be the following:

i. The filterable PM emissions shall not exceed a grain loading of 0.0018 grain/dscf. The total PM10 emissions, which includes filterable and condensible PM10, shall not exceed 0.0048 grain/dscf. The filterable PM10 emissions shall not exceed 0.0014 grain/dscf.

ii. For SO2, efficient operation of the emissions unit to minimize SO2 emissions and an emission limitation based on an emission factor of 0.07 lb SO2 per ton of steel produced.

iii. For CO, better CO conversion to CO2 through the use of an adjustable DEC gap and water cooled duct work. BACT also consists of an emission limitation based on an emission factor of 2 lbs CO/ton of steel produced.

2.d The permittee has selected visual emissions leaving the baghouse for #4 melt shop as a performance indicator of the control equipment and a way to provide compliance assurance.

II. Operational Restrictions

1. The permittee shall revise its "Scrap Management Program (SMP)" to allow the minimal use of scrap charged in the EAF that contains mercury, lead, oils, plastics, and organic materials. The SMP shall be reviewed and approved by the Canton LAA and the Ohio EPA. The SMP shall be viewed as an operational restriction for the EAF and implemented immediately upon approval. The permittee shall obtain an approved SMP prior to operating the modified version of this emissions unit. Any future change to the SMP that would increase the amount of these compounds present in the scrap, or result in the emissions of an air contaminant not previously emitted, must be approved by the Canton LAA or the Ohio EPA. Any radioactive scrap shall be returned to the scrap vendor or handled pursuant to the permittee's Radiation Management Program.

[Authority for term: PTI 15-01591]

2. The permittee shall employ, at the discharge of this emissions unit and prior to the baghouse, an improved DEC gap control system which will allow efficient air infiltration into the DEC duct work providing better CO conversion to CO2. The duct work will be water cooled to promote temperature control to aid in the CO conversion.

[Authority for term: PTI 15-01591]

3. The static pressure in the free space inside this emissions unit shall be maintained at a level which does not exceed 0.04 inch of water while the emissions unit is in operation. The static pressure level shall be maintained at all times when the EAF is operating during meltdown and refining periods. The permittee may petition the Ohio EPA to reestablish the static pressure limitation whenever the permittee can demonstrate to the Agency's satisfaction that the EAF operating conditions upon which the pressures were previously established are no longer applicable. This pressure is an element of the permittee's CAM Plan.

[Authority for Term: Section 64.6(C)(2) of 40 CFR Part 64 and PTI 15-01591]

4. The damper positions for the baghouse shall be maintained in a position in the range of 45 to 81 percent. The baghouse fan motor amperes shall be maintained at 240 amps, plus or minus 15 percent, when a fan is being operated in the #1 fan position, and 300 amps, plus or minus 15 percent, when fans are being operated in fan positions #2, 3, 4, and 6. The values of these parameters shall be maintained at the appropriate levels during operation. Operation at other than baseline values shall be considered by the Ohio EPA, DAPC to be unacceptable operation of the control system. The permittee shall operate a minimum of three fans when operating one EAF and a minimum of four fans when operating two EAFs. The permittee may petition the Ohio EPA to reestablish fan motor amp limitations whenever the permittee can demonstrate to the Agency's satisfaction that the EAF operating conditions upon which these restrictions were previously established are no longer applicable. Damper settings and fan motor amps are elements of the permittee's CAM Plan.

[Authority for Term: Section 64.6(C)(2) of 40 CFR Part 64 and PTI 15-01591]

5. The permittee shall produce no more than 1,284,800 tons of liquid steel per year and no more than 183.3 tons of liquid steel per hour from this emissions unit.

[Authority for term: PTI 15-01591]

III. Monitoring and/or Record Keeping Requirements

1. The following are requirements of 40 CFR Part 60, Subpart AAa. Observations of the opacity of the visible particulate emissions from the control devices shall be performed by a certified visible emissions observer as follows:

III. Monitoring and/or Record Keeping Requirements (continued)

1.a Visible emission observations shall be conducted at least once per day when the furnace is operating in the charging, melting, tapping, and refining period. These observations shall be taken in accordance with Method 9 of 40 CFR, Part 60, Appendix A and, for at least three 6-minute periods, the opacity shall be recorded for any point(s) where visible emissions are observed. Where it is possible to deteremine that a number of visible emission sites relate to only one incident of the visible emission, only one set of three 6-minute observations will be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the opacity limits specified in section A.I.2.a.

The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity readings and to verify that the Method 9 certifications are up to date for the responsible individuals.

[Authority for term: PTI 15-01591]

2. The permittee shall monitor the operation of the furnace control systems and maintain records in accordance with the following requirements:

2.a The permittee shall install, calibrate, and maintain a monitoring device that allows the pressure in the free space inside the EAF to be monitored. The monitoring device may be installed in any appropriate location in the EAF or DEC ductwork prior to the introduction of ambient air such that reproducible results will be obtained. The pressure monitoring device shall have an accuracy of plus or minus 5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.

2.b The permittee shall check and record on a once-per-shift basis the furnace static pressure and either (1) check and record the control system fan motor amperes and damper positions on a once-per-shift basis; or (2) install, calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood. The monitoring device may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result. The flow rate monitoring devices shall have an accuracy of plus or minus 10 percent over their normal operating range and shall be calibrated according to the manufacturer's instructions. The Ohio EPA, DAPC may require the permittee to demonstrate the accuracy of the monitoring devices relative to Methods 1 and 2 of Appendix A of 40 CFR, Part 60.

2.c The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture systems (i.e., pressure sensors, dampers, and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion.) Any deficiencies shall be recorded and proper maintenance performed. The permittee may petition the Ohio EPA, DAPC to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emission capture system.

2.d Upon approval by the USEPA, an alternative method may be established to replace the monitoring and record keeping requirements found in A.III.2.a, A.III.2.b, and A.III.2.c above.

[Authority for term: PTI 15-01591]

III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall perform a weekly check when the emissions unit is in operation during daylight hours and when the weather conditions allow, for any visible fugitive particulate emissions from any non-stack egress point from the building housing this emissions unit (e.g., windows, doors, roof monitors, etc). The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible fugitive particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

[Authority for term: PTI 15-01591]

4. The permittee shall maintain records of the tons of liquid steel produced each day, the number of operating hours per day for this emissions unit, the average hourly steel production, in tons/hour, for this emissions unit, and the total annual production of liquid steel in tons steel/year. The average hourly steel production is calculated by dividing the total tons of steel produced per day by the total number of operating hours per day for this emissions unit.

[Authority for term: PTI 15-01591]

5. Operation of approved monitoring.

a. Commencement of operation. The owner or operator shall conduct the monitoring required under 40 CFR Part 64 upon issuance of a Part 70 or 71 permit that includes such monitoring.

b. Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

c. Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

III. Monitoring and/or Record Keeping Requirements (continued)

d. Response to excursions or exceedances.

i. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

ii. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

e. Documentation of need for improved monitoring. After approval of monitoring under 40 CFR Part 64, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[Authority for term: Section 64.7 of 40 CFR Part 64]

6. Quality Improvement Plan (QIP) requirements.

a. Based on the results of a determination made under section A.III.5.d.ii of this permit, the Administrator or the permitting authority (the Canton Air Pollution Control Division) may require the owner or operator to develop and implement a QIP. Consistent with section 64.6(c)(3) of 40 CFR Part 64, the Part 70 or 71 permit may specify an appropriate threshold, such as an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, for requiring the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

b. Elements of a QIP:

i. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.

ii. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:

(a) Improved preventive maintenance practices.

(b) Process operation changes.

(c) Appropriate improvements to control methods.

(d) Other steps appropriate to correct control performance.

(e) More frequent or improved monitoring (only in conjunction with one or more steps under sections A.III.6.b.ii.(a) through (d) above.

III. Monitoring and/or Record Keeping Requirements (continued)

c. If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

d. Following implementation of a QIP, upon any subsequent determination pursuant to section A.III.5.d.ii of this permit, the Administrator or the permitting authority (the Canton Air Pollution Control Division) may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:

i. Failed to address the cause of the control device performance problems; or

ii. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

e. Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or record keeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

[Authority for term: Section 64.8 of 40 CFR Part 64]

7. General record keeping requirements.

a. The owner or operator shall comply with the record keeping requirements specified in section 70.6(a)(3)(ii) of 40 CFR Part 70. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to Section A.III.6 of this permit and any activities undertaken to implment a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable record keeping requirements.

[Authority for term: Section 64.9(b) of 40 CFR Part 64]

IV. Reporting Requirements

1. General Reporting Requirements.

a. On and after the date specified in section A.III.5.a of this permit by which the owner or operator must use monitoring that meets the requirements of 40 CFR Part 64, the owner or operator shall submit monitoring reports to the permitting authority in accordance with section 70.6(a)(3)(iii) of 40 CFR Part 70.

b. A report for monitoring under 40 CFR Part 64 shall include, at a minimum, the information required under section 70.6(a)(3)(iii) of 40 CFR Part 70 and the following information, as applicable:

i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

iii. A description of the actions taken to implement a QIP during the reporting period as specified in section A.III.6 of this permit. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[Authority for term: Section 64.9(a) of 40 CFR Part 64]

2. The permittee shall submit quarterly written deviation (excursion) reports of all exceedances of opacity restrictions contained in sections A.I.1. and A.I.2.a.iii. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity exceeds these limits. These reports are elements of the permittee's CAM Plan.

[Authority for Term: Section 64.9(a) of CFR Part 64 and PTI 15-01591]

3. The permittee shall submit quarterly written deviation (excursion) reports that identify all exceedances of the furnace static pressure values established in section A.II.3, and any operation of the control system damper positions outside of the range established in A.II.4, and fan motor amperes at values other than the values established under section A.II.4. These reports are elements of the permittee's CAM Plan.

[Authority for Term: Section 64.9(a) of CFR Part 64 and PTI 15-01591]

4. The permittee shall submit quarterly deviation reports that identify any exceedance of the permitted allowable mass emission limitations as specified in section A.I.1.

[Authority for term: PTI 15-01591]

V. Testing Requirements

1. Compliance with the emission limitation(s) of this permit shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitations:

The PM emission rate from the control device serving this emissions unit shall not exceed 37.7 lbs PM per hour.

The filterable PM10 emissions rate from the control device serving this emissions unit shall not exceed 28.7 lbs PM10 per hour.

The total PM10/PM2.5 emissions rate, which includes filterable and condensible PM10, from the control device serving this emissions unit shall not exceed 100.6 lbs PM10/PM2.5 per hour.

The lead emissions rate from the control device serving this emissions unit shall not exceed 0.06 lb/hr.

These limitations are the pounds per hour limitation for PM10 for the combined emissions from P905, P907, P160, F009, P106, and parts of P068. Emissions from the No. 4 Melt Shop Baghouse shall not exceed 0.0018 grain/dscf of filterable PM, 0.0014 grain/dscf of filterable PM10, and 0.0048 grain/dscf of total PM10.

Applicable Compliance Methods:

In adherence with USEPA's interim guidance regarding new source review for sources of PM2.5 emissions, projected PM10 emissions are to be used as a surrogate for PM2.5 emissions. Therefore, compliance with PM10 emissions will also suffice for compliance with PM2.5.

Compliance shall be demonstrated as follows:

The permittee shall demonstrate compliance with PM emission limitations in section A.I.1 by the use of USEPA Method 5, 40 CFR Part 60, Appendix A. The permittee shall demonstrate compliance with total PM10 emission limits by using USEPA Method 201 or 201A, 40 CFR Part 60, Appendix A for filterable PM10 and USEPA Method 202 for condensible PM10. The permittee shall demonstrate compliance with lead emission limitation by the use of USEPA Method 12, 40 CFR Part 60, Appendix A.

Alternative USEPA-approved methods and testing procedures may be used upon prior approval of the Canton LAA.

1.b Emission Limitations:

Visible particulate emissions shall not exceed 3% opacity as a 6-minute average as measured at the discharge stack of the No. 4 Melt Shop baghouse when the emissions unit is operating.

Visible particulate emissions of fugitive dust shall not exceed 6% opacity as a 6-minute average from the roof monitors (vents) and openings of the No. 4 Melt Shop building, including doors, windows, etc.

The visible particulate emissions from the dust handling system serving this emissions unit shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated by performing visible emission observations in accordance with the procedures specified in Method 9 of 40 CFR Part 60, Appendix A.

V. Testing Requirements (continued)

1.c Emission Limitations:

12.83 lbs/hr of SO2
18.3 lbs/hr of VOC
366.5 lbs/hr of CO
36.7 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the respective pollutant emission factor, in pounds pollutant per ton of steel produced, established during the most recent emissions test, by the actual average hourly steel production rate from section A.III.4 (tons/hr).

Compliance shall be demonstrated based upon the emission testing requirements specified in section A.V.2.

1.d Emission Limitations:

2 lbs CO/ton of steel produced
0.35 lb NOx/ton of steel produced
0.07 lb SO2/ton of steel produced
0.1 lb VOC/ton of steel produced

Applicable Compliance Method:

The permittee shall demonstrate compliance based upon the following reference test methods from 40 CFR Part 60, Appendix A or an approved alternative:

for CO, Method 10
for NOx, Method 7
for VOC, Method 25
for SO2, Method 6

1.e Emission Limitations:

165.3 tpy of filterable PM
125.6 tpy of filterable PM10
440.8 tpy of total PM10/PM2.5
160.75 tpy of NOx

Applicable Compliance Method:

The tpy emission limitations were developed by multiplying the lbs/hr emission limitations by the maximum annual hours of operation (8,760 hrs/yr), and then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitations, compliance shall also be shown with the annual emission limitations.

1.f Operational Restrictions:

The permittee shall produce no more than 1,284,800 tons liquid steel per year and no more than 183.3 tons of liquid steel per hour for this emissions unit.

Applicable Compliance Method:

The permittee shall demonstrate compliance based upon the record keeping requirements specified in section A.III.4.

V. Testing Requirements (continued)

1.g Emission Limitations:

45.0 tpy of SO2
1285 tpy of CO
62.24 tpy of VOC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the respective pollutant emission factor, in pounds of pollutant per ton of steel produced, established during the most recent stack test, by the actual annual steel production rate from section A.III.4 (tons of steel/year).

1.h Emission Limitations:

Hg emissions shall not exceed 0.061 lb/hr and 0.27 tpy.

Applicable Compliance Method:

The lbs/hr limitation was developed by multiplying the PM hourly emission of 37.74 lbs/hr by an emission factor of 0.001608 (ratio of Hg lb/hr to PM lb/hr based on Method 29 Hg stack test). The permittee shall demonstrate compliance with the hourly Hg limitation by emission testing conducted in accordance with Methods 1 through 4 and Method 29 of 40 CFR Part 60, Appendix A.

The tpy emission limitation was developed by multiplying the lb/hr emission limitation by the maximum annual hours of operation (8,760 hrs/yr), and then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual emission limitation.

1.i Emission Limitations:

Lead emissions from the control device shall not exceed 0.06 lb/hr and 0.240 tpy.

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be demonstrated based upon an emission test performed in accordance with section A.V.2. (Method 12, 40 CFR Part 60, Appendix A.).

The tpy emission limitation was developed by multiplying the lb/hr emission limitation by the maximum annual hours of operation (8,760 hrs/yr), and then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance shall also be shown with the annual emission limitation.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

2.a the emission testing shall be conducted within 6 months prior to permit expiration.

2.b the test(s) shall be conducted while the emissions units P907, P905, P106, P160 and F009 are operating at or near their maximum capacity unless otherwise specified and approved by the Canton local air agency.

2.c Emissions testing shall be conducted at the baghouse discharge to demonstrate compliance with the allowable grain loading, PM/PM10 mass emission limitations, and the control efficiency of the baghouse. The testing shall be conducted utilizing USEPA Method 5 (or an approved alternative), 40 CFR Part 60, Appendix A.

V. Testing Requirements (continued)

2.d Emissions testing shall be conducted to demonstrate compliance with the mass emission limitations for NOx, VOC, SO2, CO and lead using the following USEPA approved methods:

i. for NOx: Method 7 or a USEPA approved alternative;
ii. for VOC: Method 25 or a USEPA approved alternative;
iii. for Sulfur Dioxide: Method 6 or a USEPA approved alternative;
iv. for Carbon Monoxide: Method 10 or a USEPA approved alternative;
v. for Lead: Method 12 or a USEPA approved alternative.

2.e During the Test Method 9, visible emissions observations shall be conducted on the stack servicing this emissions unit. These readings shall be used to determine compliance with the opacity limitation in section A.I.2.

2.f The parametric monitoring requirements established for the baghouse specified in section A.I.2 shall be checked during the emissions test.

2.g The permittee shall determine compliance with the particulate matter (PM) standards as follows:

i. Method 5D shall be used for positive-pressure fabric filters to determine the particulate matter concentration and volumetric flow rate of the effluent gas. The sampling time and sample volume for each run shall be at least 4 hours and 4.50 dscm (160 DSCF) and, when a single EAF is sampled, the sampling time shall include an integral number of heats;

ii. Method 9 and the procedures of 40 CFR Part 60.11 shall be used to determine opacity; and

iii. the test runs shall be conducted concurrently, unless inclement weather interferes.

2.h The permittee shall determine compliance with the PM10 emission limits by using USEPA Methods 201 or 201A for filterable PM10 and USEPA Method 202 for condensible PM10 (Appendix A, 40 CFR Part 60).

2.i During the particulate matter runs, the permittee shall obtain the following additional information:

i. the pressure in the free space inside the furnace shall be determined during the melting and refining period(s) using the monitoring devices required by this permit; and

ii. the control system fan motor amperes and all damper positions or the volumetric flow rate through each separately ducted hood shall be determined during all periods in which a hood is operated for the purpose of capturing emissions from the EAFs.

2.j During performance tests, the permittee shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector unless the amount of dilution is separately determined and considered in the determination of emissions.

2.k Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Canton local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit's operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Canton local air agency's refusal to accept the results of the emission test(s).

Personnel from the Canton local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report, which presents the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Canton local air agency within 30 days following completion of the test. The report shall also include operating conditions of the furnace and document the tons of steel produced.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #9 EAF - #4 Melt Shop (P907)

Activity Description: Electric arc steel making furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
165 tons/hr electric arc furnace (EAF No. 9) with direct evacuation control (DEC) and a building evacuation system for capture and a baghouse (BGH01) for control	OAC rule 3745-31-05(A)(3) (PTI 15-1314) and OAC rule 3745-31-10 through OAC rule 3745-31-20	0.0032 grain of particulate emissions per dry standard cubic foot of exhaust gases 249 tpy of particulate emissions See A.I.2.b below. 43.17 lbs/hr of PM10 189.24 tpy of PM10 11.55 lbs/hr of sulfur dioxide (SO2) 50.6 tpy of SO2 nitrogen oxides: 0.35 lb/ton of steel as a 3-hour average, 33.0 lbs/hr & 144.5 tpy 660 lbs/hr of carbon monoxide (CO) 2,890.8 tpy of CO 57.75 lbs/hr of volatile organic compounds (VOC) 252.9 tpy of VOC 0.06 lb/hr of lead (Pb) 0.240 tpy of Pb (combined emissions from P905 and P907) See A.I.2.d through A.I.2.f below.
	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-11(B)	56.8 lbs/hr of particulate emissions See A.I.2.b below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	40 CFR Part 52.1881(b)(27)(viii)	See A.I.2.a below.
	40 CFR Part 60, Subpart Aaa	See A.I.2.a and A.I.2.c below.
	OAC rule 3745-17-08(B)	See A.I.2.a below.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-18-06(E)(1)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to the best available technology determination required pursuant to OAC rule 3745-31-05.

2.b This is a combined emission limitation for emissions from the baghouse serving emissions units P905, P907, and P106. This emission limitation is based upon considering emissions units P905, P907, and P106 as similar sources, and using Figure II with an uncontrolled MRE of 7,232 lbs/hr based on an emission factor of 11.3 lbs PM/ton. Therefore, 56.8 lbs/hr X 8,760 hrs/yr X 1 ton/2,000 lbs = 249 tons/yr.

2.c The following standards are requirements of 40 CFR Part 60, Subpart AAa, 40 CFR Part 52 and OAC rule 3745-31-05. Visible particulate emissions shall not exceed the following emission limitations:

i. 3% opacity as a 6-minute average from the baghouse exit;

ii. 6% opacity as a 6-minute average from the melt shop [this emission limitation is more restrictive than the NSPS emission limitation which only limits emissions due solely to the operation of an EAF(s) or AOD vessel(s)]; and

iii. 10% opacity as a 6-minute average from the dust handling equipment.

2.d The hourly emission limitations established for sulfur dioxide, nitrogen oxides, and carbon monoxide are based on the maximum hourly production rate of 165 tons of steel produced per hour.

2.e The terms and conditions of this permit were established in the federally enforceable Permit to Install 15-1314 issued on June 17, 1998 with subsequent modifications. The BAT determination for this emissions unit includes compliance with the Prevention of Significant Deterioration requirements.

2.f The emissions from emissions unit P907 shall be vented to the No. 4 Melt Shop Baghouse. This baghouse shall have a minimum control efficiency of 99%. In addition, the system shall achieve and maintain a minimum capture efficiency that is sufficient to prevent violations of the 6% opacity emission limitation for fugitive emissions from the melt shop. The capture system for the emissions unit shall include a common canopy hood and a roof control system, both of which shall vent to the No. 4 Melt Shop Baghouse.

II. Operational Restrictions

1. No more than 165 tons of steel per hour shall be processed in P907. This production rate is an average hourly rate determined by dividing the tons of steel produced per day by the number of operating hours per day.

[Authority for term: PTI 15-1314]

II. Operational Restrictions (continued)

2. The permittee shall minimize the purchase of scrap material which is excessively oily or is coated with other combustible material in accordance with the permittee's Scrap Management Plan (SMP). All grades of scrap shall be free of excessive dirt, oil, and grease. Heavily oiled scrap shall not be used. In accordance with the SMP, the permittee shall operate a radionuclide detector which will be used to inspect all incoming scrap material into the facility. Radioactive scrap material shall not be used at this facility. Any scrap material which is determined to be radioactive shall be disposed of pursuant to the permittee's Radiation Management Program.

[Authority for term: PTI 15-1314]

3. The static pressure in the the free space inside this emissions unit shall be maintained at a level which does not exceed 0.04 inch of water while the emissions unit is in operation. This static pressure level shall be maintained at all times when the EAF is operating in a meltdown and refining period. Operation at higher pressures shall be considered by the Ohio EPA, Division of Air Pollution Control (DAPC) to be unacceptable operation and maintenance of the control system.

The permittee may petition the Ohio EPA for reestablishment of the static pressure limitation whenever the permittee can demonstrate to the Agency's satisfaction that EAF operating conditions upon which the pressures were previously established are no longer applicable.

[Authority for term: PTI 15-1314]

4. The damper positions for the baghouse shall be maintained in a position in the range of 45 to 81 percent. The baghouse fan motor amperes shall be maintained at 240 amps, plus or minus 15 percent, when a fan is being operated in the #1 fan position, and 300 amps, plus or minus 15 percent, when fans are being operated in fan positions #2, 3, 4, and 6. The values of these parameters shall be maintained at the appropriate levels during operation. Operation at other than baseline values shall be considered by the Ohio EPA, DAPC to be unacceptable operation and maintenance of the control system. The permittee shall operate a minimum of three fans when operating one EAF and a minimum of four fans when operating two EAFs.

The permittee may petition the Ohio EPA for reestablished fan motor amp limitations whenever the permittee can demonstrate to the Agency's satisfaction that the EAF operating conditions upon which these restrictions were previously established are no longer applicable.

[Authority for term: PTI 15-1314]

III. Monitoring and/or Record Keeping Requirements

1. Observations of the opacity of the visible particulate emissions, performed by a certified visible emission observer, from the outlet of the control device (BGH01) shall be conducted at least once per day of operation. The observations shall occur when the furnace is operating in the charging, melting, tapping, and refining period. These observations shall be taken in accordance with Method 9 of 40 CFR Part 60, Appendix A and, for at least three consecutive 6-minute periods, the opacity shall be recorded for point(s) where the greatest visible particulate emissions are observed, and that portion of the plume where the condensed water phase is not present in accordance with the procedures listed in Method 9 of 40 CFR Part 60, Appendix A. Where it is possible to determine that a number of visible emission sites relate to only one incident of visible emissions, only one set of three consecutive 6-minute observations will be required. In this case, Method 9 observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident. Records shall be maintained of any 6-minute average that is in excess of the opacity limitation specified in section A.I.2.c.i.

The appropriate records shall be maintained in the permittee's files to identify the persons responsible for conducting the opacity observations and to verify that the Method 9 certifications are up to date for the responsible individuals.

[Authority for term: PTI 15-1314]

2. The permittee shall monitor the operation of the furnace control systems and maintain records in accordance with the following requirements:

III. Monitoring and/or Record Keeping Requirements (continued)

2.a The permittee shall calibrate and maintain a monitoring device that allows the pressure in the free space inside the EAF to be monitored. The pressure monitoring device shall have an accuracy of plus or minus 5 mm of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.

2.b On a once-per-shift basis, the permittee shall check and record the furnace static pressure, and the control system fan motor amperes and damper positions.

2.c The permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture systems (i.e., pressure sensors, dampers, and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion.) Any deficiencies shall be recorded and proper maintenance performed. The permittee may petition the Ohio EPA, DAPC to approve any alternative to monthly operational status inspections that will provide a continuous record of the operation of each emission capture system.

2.d Upon approval by the USEPA, an alternative method may be established to replace the monitoring and record keeping requirements found in sections A.III.2.a, A.III.2.b, and A.III.2.c above.

[Authority for term: PTI 15-1314]

3. The permittee shall maintain daily production records for this emissions unit. These records, at a minimum, shall contain the following information:

3.a the number of hours this emissions unit was in operation;

3.b the tons of steel produced by this emissions unit; and

3.c the average hourly production rate for this emissions unit, in tons of steel per hour, determined by dividing section A.III.3.b by section A.III.3.a.

[Authority for term: PTI 15-1314]

4. The permittee shall maintain monthly records of the tons of steel produced during each calendar month.

[Authority for term: PTI 15-1314]

5. The permittee shall perform daily checks when the emissions unit is in operation during daylight hours and when the weather conditions allow, for any visible fugitive particulate emissions from any non-stack egress point from the building housing this emissions unit (e.g., windows, doors, roof monitors, etc.). The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible fugitive particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

[Authority for term: OAC rule 3745-77-07(C)]

IV. Reporting Requirements

1. The permittee shall submit quarterly written deviation (excursion) reports that identify all exceedances of the opacity limitations contained in section A.I.2.c.i above. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity exceeds these limitations.

[Authority for term: PTI 15-1314]

2. The permittee shall submit quarterly written deviation (excursion) reports that identify all exceedances of the furnace static pressure value established in section A.II.3, any operation of the control system damper positions outside of the range established in section A.II.4, and fan motor amperes at values other than the values established under section A.II.4.

[Authority for term: PTI 15-1314]

3. The permittee shall submit quarterly written deviation (excursion) reports that identify any day in which the average hourly production rate of this emissions unit exceeded 165 tons/hr.

[Authority for term: PTI 15-1314]

4. The permittee shall submit semiannual written reports that:

4.a identify all days during which any visible fugitive particulate emissions were observed from any non-stack egress point (i.e., windows, doors, roof monitors, etc.) serving this emissions unit; and

4.b describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

These reports shall be submitted by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)]

5. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

[Authority for term: OAC rule 3745-77-07(C)]

6. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

[Authority for term: PTI 15-1314]

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitations:

56.8 lbs/hr of particulate emissions for the combined emissions from emissions units P905, P907 and P106

43.17 lbs/hr of PM10 for the combined emissions from emissions units P905, P907 and P106

BACT emission limitation of 0.0032 grain of particulate emissions per dry standard cubic foot of exhaust gases from the No. 4 Melt Shop Baghouse

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2.
For particulate emissions - Method 5 of 40 CFR Part 60, Appendix A.
For PM10 - Method 201 of 40 CFR Part 60, Appendix A.

[Authority for term: PTI 15-1314]

V. Testing Requirements (continued)

1.b Emission Limitations:

3% opacity as a 6-minute average from the baghouse exit
6% opacity as a 6-minute average from the melt shop
10% opacity as a 6-minute average from the dust-handling system

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. Method 9, 40 CFR Part 60, Appendix A and the procedures of 40 CFR Part 60.11 shall be used to determine the opacity of the visible particulate emissions, as outlined in section A.III.1.

[Authority for term: PTI 15-1314]

1.c Emission Limitations:

11.55 lbs/hr of SO2

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the sulfur dioxide emission factor of 0.002 pound SO2 per ton of steel produced, established during the April 15 and 19, 1999 emission tests, by the actual average hourly steel processing rate from section A.III.3 (tons/hour). Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 6, 40 CFR Part 60, Appendix A.)

[Authority for term: PTI 15-1314]

1.d Emission Limitations:

33.0 lbs/hr of NOx
0.35 lb NOx/ton of steel as a 3-hour average

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 7 or 7E, 40 CFR Part 60, Appendix A.). As part of the stack test submittal, the permittee shall submit calculations for the lbs of NOx/ton of liquid steel produced, which shall be determined by dividing the average hourly mass emission rate for NOx as measured during the performance test, divided by the average hourly amount of liquid steel produced during the same period. The sampling time for each run, when doing the NOx testing, shall be approximately 3 hours in duration. Each run shall include an integral number of heats.

[Authority for term: PTI 15-1314]

1.e Emission Limitation:

660 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the carbon monoxide emission factor of 0.8 pound CO per ton of steel produced, established during the April 15 and 19, 1999 emission tests, by the actual average hourly steel processing rate from section A.III.3 (tons/hour). Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 10, 40 CFR Part 60, Appendix A.)

[Authority for term: PTI 15-1314]

V. Testing Requirements (continued)

1.f Emission Limitation:

57.75 lbs/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the VOC emission factor of 0.11 pound VOC per ton of steel produced, established during the April 15 and 19, 1999 emission tests, by the actual average hourly steel processing rate from section A.III.3 (tons/hour). Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 25 or Method 25A, 40 CFR Part 60, Appendix A.)

[Authority for term: PTI 15-1314]

1.g Emission Limitation:

0.06 lb/hr of Pb for combined emissions from P905 and P907

Applicable Compliance Method:

Compliance shall be demonstrated through emission tests performed in accordance with section A.V.2. (Method 12, 40 CFR Part 60, Appendix A.)

[Authority for term: PTI 15-1314]

1.h Emission Limitations:

249 tpy of particulate emisions
189.24 tpy of PM10
50.6 tpy of SO2
144.5 tpy of NOx
2,890.8 tpy of CO
252.9 tpy of VOC
0.240 tpy of Pb

Applicable Compliance Method:

The tpy emission limitations were developed by multiplying the lbs/hr emission limitations by the maximum annual hours of operation (8,760 hrs/yr), and then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitations, compliance shall also be shown with the annual emission limitations.

[Authority for term: PTI 15-1314]

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

2.a The emission testing shall be conducted within 6 months prior to permit expiration for the pollutants listed in section A.V.2.e below.

2.b The test(s) shall be conducted while emissions units P106, P905, and P907 are all operating at or near their maximum capacities, unless otherwise specified or approved by the CCHD, APCD.

2.c The parametric monitoring requirements established in sections A.II.3 and A.II.4 shall be checked during the emission tests.

2.d During the emission tests, the permittee shall not add gaseous diluents to the effluent gas stream after the fabric in any pressurized fabric filter collector unless the amount of dilution is separately determined and considered in the determination of emissions.

V. Testing Requirements (continued)

2.e The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

i. for particulates - Method 5 of 40 CFR Part 60, Appendix A;

(a) Method 5D shall be used for positive-pressure fabric filters to determine the particulate matter concentration and volumetric flow rate of the effluent gas. The sampling time and sample volume for each test run shall be at least 4 hours and 4.50 dscm (160 DSCF) and, when a single EAF is sampled, the sampling time shall include an integral number of heats.

(b) If the test results show particulate emissions exceed the PM10 emission limitation, then the permittee shall perform a particle size distribution to determine the fraction of the PM10 present in the sample which was collected via Method 5.

ii. for opacity - Method 9 of 40 CFR Part 60, Appendix A and the procedures of 40 CFR Part 60.11;

(a) The Method 5 and Method 9 test runs shall be conducted concurrently, unless inclement weather interferes.

iii. for SO2 - Method 6 of 40 CFR Part 60, Appendix A;

iv. for CO - Method 10 of 40 CFR Part 60, Appendix A;

v. for NOx - Method 7 or 7E of 40 CFR Part 60, Appendix A;

vi. for VOC - Method 25 of 40 CFR Part 60, Appendix A;

vii. for Pb - Method 12 of 40 CFR Part 60, Appendix A; and

viii. for PM10 - Method 201 of 40 CFR Part 60, Appendix A.

Alternate USEPA-approved test methods may be substituted with prior approval of the CCHD, APCD.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

[Authority for term: PTI 15-1314]

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
165 tons/hr electric arc furnace (EAF no. 9) with direct evacuation control (DEC) and a building evacuation system for capture and a baghouse (BGH01) for control		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

1. An evaluation of air toxic emissions was performed by the permittee. With the exception of aluminum (Al) and zinc (Zn), emissions of other air toxic pollutants did not exceed one (1) ton per year. The air toxics analyses for Zn showed concentrations of only 1% of the MAGLC and for Al only 3% of the MAGLC. In the event that additional air toxic emissions should exceed one (1) ton per year in the future, the permittee shall perform an evaluation to determine compliance with Ohio EPA's Air Toxics Policy.

[Authority for term: PTI 15-1314]

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #4 Melt Shop Ladle Dryers/Preheaters (Z002)

Activity Description: Natural gas fired ladle dryer/preheater stands

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
#4 melt shop ladle dryers/preheaters, 6 natural gas-fired ladle dryer stands: 2 rated at 12 mmBtu/hr and 4 rated at 14 mmBtu/hr (80 mmBtu/hr total)	OAC rule 3745-17-07(B)(3)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.

2. Additional Terms and Conditions

2.a Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 6-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

2.b The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM).

At a minimum, the permittee's employment of RACM shall consist of the use of only natural gas as fuel for this emissions unit. No additional controls are necessary for this emissions unit to satisfy the RACM requirements specified in OAC rule 3745-17-08(B), because the particulate emissions generated by this emissions unit are due solely to the combustion of natural gas.

II. Operational Restrictions

1. The permittee shall burn only natural gas as fuel in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.

2. The permittee shall submit the required deviation (excursion) reports in acordance with Part I - General Term and Condition A.1.c.

IV. Reporting Requirements (continued)

3. All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

V. Testing Requirements

1. If required, compliance with the emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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